

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

John Janovy Publications

Papers in the Biological Sciences

10-1965

Review of *Modern Biological Principles* by A.M. Winchester; Van Nostrand, 1965

John J. Janovy Jr.

University of Nebraska - Lincoln, jjjanovy1@unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/bioscijanovy>



Part of the [Parasitology Commons](#)

Janovy, John J. Jr., "Review of *Modern Biological Principles* by A.M. Winchester; Van Nostrand, 1965" (1965). *John Janovy Publications*. 34.

<https://digitalcommons.unl.edu/bioscijanovy/34>

This Article is brought to you for free and open access by the Papers in the Biological Sciences at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in John Janovy Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

such as Watson and Crick's genetic code theory are presented, the instructor is left the task of impressing students with the full scientific and historic significance of these ideas. But a modern biology teacher should, I think, always feel responsible for adequate performance of this task and "Modern Biological Principles" furnishes an excellent *basis* for discussions of the impact of Darwin, the atomic bomb, and Watson and Crick on biology.

Perhaps as important as the modern approach is the illustrative material of this book. The photographs are, in general, quite impressive and give the reader views of living organisms that enhance his understanding. The diagrams, however, are often not of such high educational quality. Certain diagrams, *e.g.*, those depicting RNA function and the entry of foods into the energy releasing metabolic pathways, may not add significantly to a student's understanding of these phenomena.

In general, the book does not go deeply enough into biology to serve as a text in an upgraded introductory course for majors in the life sciences. "Modern Biological Principles" is, however, ideal for a beginning course for non-majors, and would be an outstanding book for advanced courses in biology at the high school level.

John Janovy, Jr.
Department of Zoology
University of Oklahoma

MODERN BIOLOGICAL PRINCIPLES, by A. M. Winchester, Van Nostrand Company, Ltd., New York, 449 pages, 343 figs., 1965.

"Modern Biological Principles" is, as the name suggests, truly modern. This characteristic is one of the book's strongest attributes. An effort is made at least to introduce the reader to the biological advances which not only created new fields of study in the life sciences, but also modified the old concepts. Examples of the modern nature of this book are the chapters on the origin of life (presented in a rather unexciting manner but nevertheless present!), gene control of cell activity, energy conversion, and man and the biological communities of the future. However, clear distinction is not always made between hypothesis and theory in these areas. Great stress is laid on biology at the molecular and cellular level, but the chapters on molecular and cellular biology lead naturally into those concerning the organismal and community levels. In many cases, although new concepts